

BERKELEY WATERFRONT SPECIFIC PLAN:

AMENDMENT TO THE CITY'S MASTER PLAN

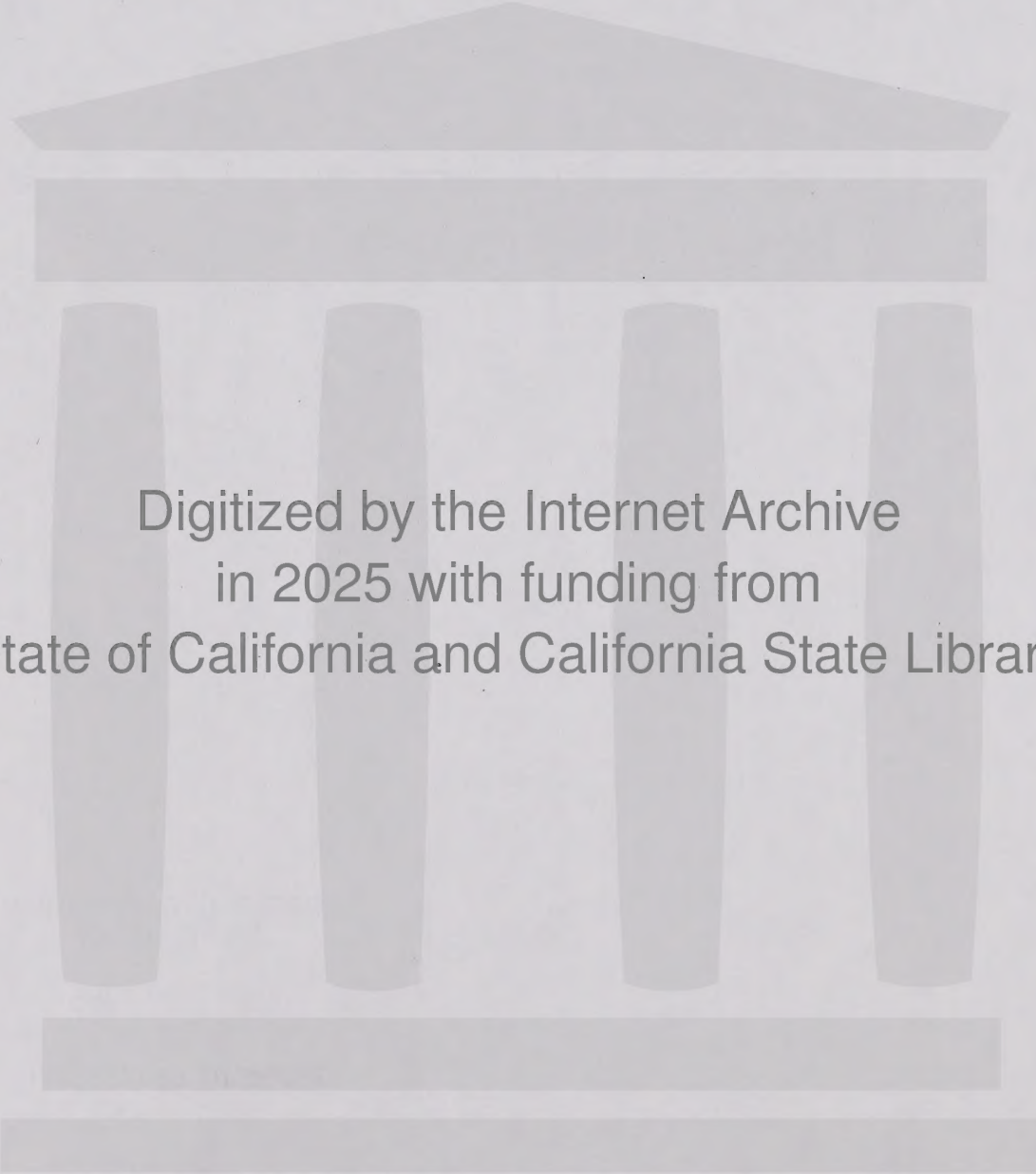
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Berkeley Waterfront Specific Plan

Introduction

The Berkeley Waterfront as defined for this Specific Plan consists of approximately 170 acres of privately held land and adjacent water areas bounded by the Interstate 80 freeway on the east, the Berkeley Marina on the west, and the city limits of Albany and Emeryville on the north and south.

Under California law (Government Code Section 6540 et seq.), a city or county may use a specific plan to establish regulations, programs, and legislation to carry out that jurisdiction's general plan. (The City of Berkeley refers to its general plan as the Master Plan.) The law requires that a specific plan include text and diagrams addressing the distribution, location, and intensity of land uses, including open space, within the plan area; the distribution, location, and capacity of major infrastructure improvements, including transportation, sewage, stormwater drainage, solid waste disposal, and energy systems; standards and criteria for development and utilization of natural resources; and implementation measures, including capital improvements and financing mechanisms necessary to carry out the plan.

A specific plan provides an opportunity to translate the broad goals and policies of the Master Plan into a mechanism for controlling development. It serves the same purpose as conventional zoning for the site. In the case of the Berkeley Waterfront, which is a large, undeveloped area under one ownership, which has been the subject of an intensive planning program, a specific plan is particularly appropriate as a means of expressing a wide

range of policy directives for development, and as a means of assuring integrated development of the entire area. A specific plan also helps the community to understand how the Master Plan will work. It describes requirements for review before development can occur in the Plan Implementation Section.

The specific plan contains the following sections:

1. Description of the Relationship Between the Specific Plan and General Plan and Other Regulations.
2. Specific Plan Objectives.
3. Land Use/Open Space.
4. Circulation.
5. Utilities.
6. Community Design.
7. Plan Implementation.

1. Description of Relationship Between Specific Plan, General Plan and Other Regulations

The California Government Code (Section 65454) states that a specific plan can only be adopted or amended if it is consistent with the jurisdiction's general plan. The Berkeley Waterfront Specific Plan has been prepared as a means of implementing the amendment to the City's 1977 Master Plan for the Waterfront area, which has been prepared and is being reviewed concurrently. This amendment to the Master Plan has been adopted prior to action on this Specific Plan, with the intent of using the Specific Plan as the implementation mechanism for Master Plan policies. Therefore, the Specific

Plan is designed to be directly and completely consistent with the City of Berkeley's General Plan (Master Plan).

Section 65455 of the Government Code requires that once a specific plan has been adopted, no local public works project, tentative subdivision map, or zoning ordinance can be undertaken for the plan area that is in conflict with the specific plan. Whenever the provisions of this specific plan conflict with the provisions of the Berkeley zoning ordinance, or whenever the provisions of the Berkeley zoning ordinance reflect an internal conflict, the specific plan shall govern.

The development standards set forth in this specific plan will not preempt municipal building or health and safety codes. No permit will be issued for development that does not meet the requirements of these regulations.

The Master Plan amendment for the Berkeley Waterfront contains goals and policies for each of the elements required for general plans under State law (California Government Code, Sections 65300 et seq.). That document, together with the background reports cited in the Appendix, contains the information on conditions, opportunities, and constraints from which the Master Plan policies and the implementing actions of this Specific Plan are derived.

2. Specific Plan Objectives

The Master Plan amendment for the Berkeley Waterfront set forth the following goals:

1. Establish the Waterfront as an area primarily for recreation, open space and ecological uses.

2. Develop the Waterfront as part of a continuous East Bay shoreline open space system.

3. Provide for an appropriate amount of private development, to make the Waterfront part of a vibrant urban community, attractive to and usable by people.

4. In all types of development meet the needs of unemployed and underemployed Berkeley residents, in both construction and permanent jobs.

5. Establish uses and activities that reflect and enhance the unique character of the Waterfront location.

To accomplish these goals, as well as the policies in the elements of the Master Plan amendment, the Specific Plan is directed toward the following objectives for protection, enhancement, and development of the Waterfront:

2.1 Land Use/Open Space Configuration

- Develop a configuration of hotel, retail, and structured public uses along the freeway, as an integrated whole, the total amount of for-profit commercial development not to exceed 565,000 square feet.
- Prohibit the development of offices (except for offices which directly support permitted uses), residential, and industrial uses on the Waterfront.
- Acquire the Brickyard, Central Meadow, and as much as possible of the East Meadow for public recreation and open space purposes.
- Require dedication of a 100-foot band along the shoreline for public access purposes.

2.2 Environmental Protection and Mitigation

- Prohibit development on quality wetlands or on tidal or marsh habitats.
- Prohibit filling of the Bay for any purpose, except for possible development of Berkeley Beach south of the Brickyard or small amounts of fill required for shoreline improvements for public areas or stabilization.
- If any public or private development is likely to have adverse impacts on wetlands, tidal, or marsh habitats, require that these impacts be mitigated within the Waterfront area as close as possible to the impact location, to protect and enhance the type of habitat being affected.

2.3 Phasing of Development

The Waterfront Plan assumes that land not under lease to the Pacific Racing Association will develop in Phase I, and that Phase II of development will occur after that lease has expired.

- Allow only the amount and type of development that will not exceed traffic level of service "D" on the Waterfront site and at the intersections of Gilman, University, Ashby, 6th and San Pablo in Berkeley.
- Take into account existing, approved, and proposed development in Albany and Emeryville in determining traffic capacity for Berkeley Waterfront development.

- Require the developer to finance on- and off-site circulation improvements that will assure level of service "D", if the development is to take place before completion of improvements by CalTrans that will attain this level of service.

2.4 Social and Economic Problems

- Target construction and permanent jobs generated by development on the Waterfront to Berkeley residents, especially the unemployed and underemployed, through agreements between the developer and the City.
- Provide for mitigation of adverse impacts on the supply of affordable housing from Waterfront development, through agreements between the developer and the City.
- Assure that all private and public development at the Waterfront reflects the cultural and economic diversity of Berkeley residents, and meets their needs, and attract people of all ages, income levels, cultures, and levels of ability.
- Require that hotel developers provide accommodations that are affordable to low- and moderate-income travelers, either within the building or elsewhere on the Waterfront.

2.5 Safety Requirements

- Require placement of structures and strict construction standards to minimize damage and life safety hazards in the event of a major earthquake or tsunami.

- Prepare the site and elevate structures to protect them from damage from a 100-year flood event.
- Assure that development does not cause leaching into the waters of the Bay, especially of toxic or other hazardous materials.
- Place structures of least noise sensitivity closest to the freeway, and include soundproofing in their construction; place more noise sensitive activities, such as passive outdoor recreation, farther from the freeway. Shield sensitive uses with non-sensitive uses.
- Add and grade soil to create buffers between the freeway and structures.

3. Land Use/Open Space

The Specific Plan establishes land use and open space requirements for the following sub-areas of the Waterfront, as shown on Figure 1:

- Berkeley Beach Strip, 7 acres from the Emeryville city limits on the south to the Brickyard.
- Brickyard, 27 acres southwest of the University Avenue-Interstate 80 interchange.
- Central Meadow, 50 acres bounded by University Avenue on the south, the Frontage Road on the east, the Berkeley Marina on the west, and the North Basin shoreline band on the north.
- East Meadow/Phase 1 Planning Area, 30 acres bounded by the Interstate 80 Freeway on the east, University Avenue on the south, the Central Meadow open space on the west, and the extension of Cedar Street on the north.

- North Basin Strip, 25 acres bounded by the freeway on the east, the extension of Cedar Street on the south, the North Basin on the west, and Gilman Street on the north.
- Stables Area, 29 acres bounded by the freeway on the east, Gilman Street on the south, the Bay on the west, and the Albany city limits on the north.
- South Basin, 291 acres of open water south of Virginia Street.
- North Basin, 214 acres of open water north of the extension of Virginia Street.

3.1 Berkeley Beach Strip

3.1.1 Close the Frontage Road from University Avenue to the Ashby Avenue southbound ramps, as part of CalTrans improvement of the Interstate 80 freeway.

3.1.2 Require public dedication by the property owner of the entire area between the freeway right-of-way and the shoreline for public access purposes.

3.1.3 Stabilize the shoreline by adding or improving riprap as required from University Avenue to Emeryville.

3.1.4 Develop a pedestrian and bicycle path along the shoreline.

3.1.5 Plan for the future development of a beach west of the present shoreline, provided that water quality meets necessary standards and that BCDC permits can be obtained for any needed fill. Possible configurations include a perched beach, with sand fill behind a low sea wall in front of the existing rip-rap; or a tidal beach created by placement along the shoreline of sand

hydraulically mined from the Ashby shoal; or minor shoreline alterations to encourage faster natural sedimentations to create a tidal beach.

3.1.6 Permit no structures to be built in this area, except for those needed to support public recreation uses, such as restrooms and changing rooms.

3.2 Brickyard

3.2.1 Require public dedication of the 100-foot shoreline band by the property owner, for public access purposes.

3.2.2. Acquire the remainder of the Brickyard for public recreation and open space purposes.

3.2.3 Develop an Interpretive Center, with exhibits explaining the history and ecology of the East Bay Shoreline, with maps showing public access, recreational facilities, and other information.

3.2.4 Develop a small hostel, with rates affordable to low- and moderate-income travelers.

3.2.5 Allow a total amount of no more than 12,000 square feet of development for the Interpretive Center and hostel.

3.2.6 Provide parking for this development in accordance with the standards in Table 1.

3.2.7 Allow a building height of no more than 15 feet for all structures in the Brickyard.

3.2.8 Develop a parking lot with 160 spaces as close as possible to the University Avenue/Interstate 80 interchange, to accommodate other Waterfront visitors.

3.2.9 Establish the Brickyard Spit as a nature preserve and shorebird habitat.

3.2.10 Improve the appearance and quality of shoreline riprap.

3.2.11 Improve the quality of the mudflats and wetlands habitat east of the Brickyard Spit; protect these areas from impacts of nearby development.

3.2.12 Extend the Strawberry Creek outfall to the existing edge of the shoreline at the Brickyard, to minimize erosion to the shoreline. As an alternative, investigate the feasibility and impacts of extending Strawberry Creek areas from the Brickyard into Brickyard Cove, in an open natural conjunction.

3.3 Central Meadow

3.3.1. Require/public dedication of the 100-foot shoreline band by the property owner, for public access purposes.

3.3.2. Acquire the approximately 50-acre Central Meadow for public recreation and open space purposes.

3.3.3. Improve the shoreline for stabilization with new and additional riprap as required.

3.3.4. Allow no adverse development, grading, or paving in established quality wetland habitat.

3.3.5. Promote the improvement of degraded wetlands by requiring that any development produce a net increase in wetlands quality.

3.3.6 Develop up to 25 acres of playing fields, for both structured and unstructured activities, consistent with the wetlands protection policy.

3.3.7 Develop a small boating center along the northern shoreline, with guest slips, rentals, and facilities for small watercraft (such as sailing, rowing, paddle and sail-board).

3.3.8 Develop trails for bicycle and pedestrian access along the shoreline south of University Avenue, along the Virginia Street right-of-way, at the Marina, and on a north-south exit connecting the North Basin Strip with the Brickyard.

3.3.9 Allow no structures in the Meadow except for those which support public recreation purposes, such as rest rooms, locker rooms, refreshment stands, boat launching facilities, and interpretive kiosks.

3.3.10 Allow no overnight accommodations in the Meadow.

TABLE 1

BERKELEY WATERFRONT

PARKING REQUIREMENTS

HOTEL

- 1 space per room max.
- 8 spaces per room min.

CONFERENCE CENTER

- 1 space per 200 sf. min.
- 1 space per 165 sf. max. (maximize joint use of parking with adjacent development)

SPECIALTY RETAIL

- 2.5 spaces per 1000 sf.

RESTAURANT

- 1 space/50 sf. of seating area
- plus 1 space/400 sf. for remaining area

PUBLIC OPEN SPACE

- 4.6 spaces per acre (average)

3.4. East Meadow/Phase 1 Planning Area

3.4.1 Require public dedication of the 100-foot shoreline band by the property owner, for public access purposes.

3.4.2 Acquire for public recreation and open space uses as much of the East Meadow area as possible, immediately north of University Avenue, consistent with the integrity of the Phase 1 development program.

3.4.3 Develop a landmark quality hotel, with approximately 450 rooms and 300,000 square feet. Locate outdoor recreation facilities which are part of the hotel, such as tennis courts, to the north of the hotel and near the freeway.

3.4.4 Develop a conference center of approximately 30,000 square feet as part of the hotel complex.

3.4.5 Develop approximately 8,000 square feet of restaurant(s) and food-related services as part of the hotel complex.

3.4.6 Provide parking to serve this development, in accordance with the standards in Table 1.

3.4.7 Develop parking lots with 150 spaces as close as possible to the University Avenue Interstate 80 interchange, to accommodate Waterfront visitors.

3.4.8 Design all development to open to adjacent public open space areas and pedestrian/bicycle access routes.

3.4.9 Allow flexibility in the placement of those components of development. The City will negotiate with the developer regarding the Virginia Street right-of-way, which could be exchanged for equivalent public benefits.

3.4.10 Allow a total amount of commercial development in this area not to exceed approximately 338,000 square feet.

3.4.11 If the placement of the hotel complex allows adequate space, provide for the development of a visionary public use such as an International Peace and Cultural Center between the hotel and University Avenue. A Center of 170,000 square feet would require approximately 13 acres. Parking could be shared with adjacent commercial uses. If this site is not possible, space should be provided in the North Basin Strip area. (See 3.5.9.)

3.4.12 Allow a maximum height of 45 feet for all structures in this area, with a stepping-down of heights to the Meadow.

3.5 North Basin Strip

3.5.1 Require public dedication by the property owner of the 100-foot shoreline band for public access purposes.

3.5.2 As part of the commercial program, require the developer to improve the 100-foot shoreline band north of Virginia Street to improve shoreline appearance, provide protection from flooding, and stabilize the shoreline against erosion.

3.5.3 Develop a Waterfront retail center of approximately 50,000 square feet, featuring restaurants and food related outlets, serving a wide range of income groups and representing the City's ethnic and cultural diversity, and shops related to recreation, such as equipment rental and sales and supplies.

3.5.4 Provide parking spaces to serve this development in accordance with the standards in Table 1.

3.5.5 Locate and organize the retail center to provide maximum integration of functional relationships with the hotel complex to the south.

3.5.6 Locate and design the retail center so that it serves and creates visual interest for the bicycle/pedestrian path along the shoreline.

3.5.7 Develop a bicycle/pedestrian path along the shoreline from Gilman Street to Virginia Street, connecting with the Virginia/Cedar Street access route and with the route extending through the East Meadow to the Brickyard.

3.5.8 Allow a maximum building height of no more than 25 feet in this area.

3.5.9 If adequate space cannot be provided for a visionary public use such as an International Peace and Cultural Center immediately north of University Avenue, publicly acquire approximately 13 acres as close as possible to Gilman Street for this purpose.

3.5.10 Provide on-shore support facilities for water recreation in the North Basin, such as launching facilities and boat houses for small craft.

3.6 Stables Area

3.6.1 Require public dedication by the property owner of the 100-foot shoreline band for public access purposes.

3.6.2 As part of the commercial program, require the developer to improve the 100-foot shoreline band to improve shoreline appearance, provide protection from flooding, and stabilize the shoreline against erosion.

3.6.3 Develop a shoreline pedestrian/bicycle path extending from Gilman Street to the city limits to connect with planned improvements in Albany, and

connecting along the Gilman Street right-of-way to the eastside of Interstate 80.

3.6.4 Develop a hotel of approximately 250 rooms, with approximately 165,000 square feet, in phase II, or when transportation capacity permits.

3.6.5 Develop approximately 10,000 square feet of restaurants and food-related services as part of the hotel complex.

3.6.6 Provide parking to serve this development, in accordance with the standards in Table 1.

3.6.7 Provide a parking lot with 150 spaces as close as possible to the Gilman Street/Interstate 80 interchange to accommodate Waterfront visitors.

3.6.8 Allow a maximum of approximately 75,000 square feet of commercial development in this area.

3.6.9 Allow a maximum height of 45 feet for all structures in this area.

3.7 South Basin

3.7.1 Provide for open water sports such as wind surfing and boating.

3.7.2 Relocate Strawberry Creek to the existing edge of the shoreline at the Brickyard, or across the Brickyard to Brickyard Cove, to improve water quality, wetlands habitat, and to enhance natural beach formation.

3.8 North Basin

3.8.1 Provide for sheltered water sports such as small boat launching and mooring (sailing, rowing, paddle, and sail-boarding), with support facilities on the north wide of the Meadow and along the North Basin Strip.

3.8.2 Dredge the area as required to accommodate small boats.

3.8.3 Provide for the eventual development of piers along the alignment of Gilman Street extension for public viewing and fishing.

4.0 Circulation

The major components of the circulation element of the Waterfront Plan include; 1) modifications to the Interstate 80 freeway corridor; 2) improvements to the roadways, bicycle paths, and pedestrian routes at the Waterfront; 3) modifications to the existing local transit service; and 4) minor short-term improvements by the developer.

4.1. Interstate 80 Modifications

CalTrans is preparing plans for improvements within Berkeley to the Interstate 80 freeway that include adding lanes to the freeway cross section; rebuilding all three interchanges at University Avenue, Gilman Street, and Ashby Street; providing a new, grade-separated bicycle/pedestrian facility within the University Avenue interchange; and adding sound wall barriers along the Aquatic Park frontage. The circulation element of the Waterfront Plan includes a number of modifications to these improvements to better serve the land use/open space element, reduce the traffic impacts from diversion of automobiles onto City streets during the peak-hour periods, and improve the bicycle and pedestrian connections between the Waterfront and the adjacent west Berkeley neighborhoods. (See Figures 2, 3, 4, and 5)

4.1.1 Freeway Section Between Gilman and University

Improve Interstate 80 to five freeway lanes plus one auxiliary lane north and southbound.

4.1.2 Freeway Section Between University and Ashby

Improve Interstate 80 to five freeway lanes plus one auxiliary lane north and southbound.

Eliminate Bolivar Street adjacent to Interstate 80 and replace with a landscaped buffer and sound wall to mitigate the noise impacts of the freeway on Aquatic Park.

Replace the frontage road in this segment with a minimum 10-foot wide landscaped buffer and a 12-foot wide, 2-way bicycle way accessible to service and emergency vehicles. Include a landscaped pedestrian promenade and beach in this segment, the width and configuration of which to be determined by the beach design selected. In order to accommodate these public access improvements, some bay fill will be required.

4.1.3. University Avenue Interchange

Southbound: Replace the existing double loop with a single loop on-ramp from westbound University Avenue and a right turn diamond on-ramp for eastbound University and a southbound diamond off-ramp to University.

Northbound: Replace the northbound right-turn-only diamond ramps with a signalized diamond off-ramp which allows all turning movements and a northbound on-ramp with a slip-ramp that connects with northbound Interstate 80 and northbound Eastshore Highway, approximately 700 feet north of

University Avenue. Design the ramp to provide for the northbound off-ramp traffic to cross University Avenue at the signalized intersection and continue north to Eastshore Highway.

Eastshore Highway: Convert Eastshore Highway from Hearst Street to Virginia Street from two-way to one-way northbound operations.

Centerline: In order to achieve this ramp configuration, relocate the centerline of Interstate 80 approximately 24 feet westerly in the vicinity of Delaware Street.

Bicycle/Pedestrian Ramp: Construct a 20-foot wide, two-way bicycle/pedestrian facility between the intersection of University Avenue and the new Shoreline Drive to Bolivar Drive at Aquatic Park. The path will go beneath the southbound freeway on-ramp, then loop up to University Avenue, cross the northbound off-ramp at grade under signal control, and connect with Bolivar Drive with a down-ramp. Construct a 12-foot wide, two-way bicycle/pedestrian facility on a new structure parallel to and south of the existing University Avenue structure between the ramp to Bolivar Drive and a Fifth Street touchdown.

University Avenue Frontage Road: To accommodate the 12-foot wide ramp facility along the southside of the University Avenue structure, shift the existing traffic lane on the eastbound Frontage Road beneath University Avenue to the curb lane adjacent to the existing businesses. Street parking can be accommodated between the columns supporting the ramp structure between Second and Fourth Streets.

Eliminate all parking between Fourth Street and Fifth Streets to accommodate the transition of the bicycle-pedestrian ramp to Fifth Street. At

Fifth Street, the bicycle/pedestrian route will cross the eastbound University Avenue Frontage Road on-grade. Control traffic on the University Avenue frontage road by a stop sign.

Virginia/Cedar Street Overcrossing: Construct a 12-foot wide, two-way bicycle/pedestrian facility between the west Berkeley neighborhood and the Waterfront. The design calls for a crossing of the freeway on the Cedar Street right-of-way with a touchdown ramp connecting to Virginia Street, providing continuity to the existing bicycle trail system. Control the intersection of Eastshore Highway and Virginia Street by a stop sign to facilitate the safe crossing of bicycles and pedestrians. On the Waterfront side, integrate the overcrossing with site grading to intercept the facility and provide a transition related to the surrounding open space improvements.

4.1.4 Ashby Avenue Interchange

Northbound: No changes are recommended to the CalTrans proposals.

Southbound: The elimination of Frontage Road north of the ramps will allow the realignment of the southbound freeway off/on ramps to connect directly with Ashby. This will eliminate one signalized intersection at the Ashby Avenue interchange, reducing congestion, delays, etc.

Park and Ride Lot: Make the park and ride lot proposed by CalTrans accessible to recreational users on weekends and holidays.

4.1.5 Gilman Street Interchange

Make roadway improvements, street lighting improvements, restriping, and new directional signing in the vicinity of the Gilman Street interchange to

improve the operating performance of the freeway and reduce impacts on the City's street network.

Second Street: Convert Second Street between Gilman and Harrison to two-way operation, striped with two lanes north and one lane south to facilitate operations at the refuse center. Signalize the intersection of Gilman Street and Second Street. Install a new four-way stop at Second Street and Page Street.

East Shore Highway: Restrict East Shore Highway at Gilman to right-turn out. Install a new three-way stop at East Shore Highway and Page Street.

Gilman Street: Resurface Gilman and widen to five lanes from Second Street to the New Shoreline Drive (four lanes plus left or right turn pockets at the major intersections); provide left turns pockets beneath the freeway overcrossing at Gilman Street in addition to the four-lane section proposed by CalTrans to provide for left turns onto the freeway on-ramps. Signalize the off- and on-ramps east and west of the freeway at Gilman Street. Establish a new intersection with Shoreline Drive at a distance of five hundred feet west of the southbound freeway off-ramps.

4.2.0 Waterfront Circulation Network

The circulation network for the Waterfront is intended to provide vehicular, bicycle, and pedestrian access to the presently undeveloped portions of the Waterfront. The circulation network will utilize many of the existing City-owned street right-of-ways to achieve connections with the existing circulation network and provide for new continuous north-south shoreline access between Berkeley and its adjacent waterfront

municipalities. The specific improvements included in the Waterfront circulation network are listed below: (See figure 6).

4.2.1 Bicycle/Pedestrian Improvements

Continuous Shoreline Trails: Provide a continuous paved, two-way bicycle way and a pedestrian way along the shoreline from Albany City limits to Emeryville. The minimum width of the bicycle way will be six feet in each direction. The minimum pedestrian way will be 12 feet, widened at areas with concentrated activity. The bicycle/pedestrian ways will be located in a minimum 100-foot wide shoreline circulation corridor adjacent to the Bay's edge.

Locate the bicycle/pedestrian ways to provide continuous shoreline access along the entire Bay edge, including the North Sailing Basin and the South Sailing Basin, the Meadow, the Brickyard, and Berkeley Beach. Also provide a connection across the East Meadow.

West Berkeley Connections: Provide bicycle/pedestrian connections to the west Berkeley neighborhood pedestrian and bike ways at University Avenue, Virginia Street, Gilman Street, Ashby Avenue, and at the proposed new bicycle/pedestrian crossing at Virginia/Cedar Street.

North Waterfront Park and Marina Connections: Provide bicycle/pedestrian connections to the City-owned Marina area by means of a new shoreline esplanade on the east edge of the Berkeley Marina and connections to the bicycle/pedestrian ways linking North Waterfront Park and Shorebird Park.

Brickyard: Provide a pedestrian trail from the continuous shoreline pedestrian way out to the end of the Brickyard spit.

Emergency Access: Design all bicycle and pedestrian ways to accommodate emergency vehicles.

Handicapped Access: Design all pedestrian ways to be barrier free, to promote use by the movement impaired.

4.2.2 Shoreline Drive

Location and Section: Build a new Shoreline Drive from the Phase II hotel development site at the present location of the Horse Barns to University Avenue, with one moving lane plus a parking lane in each direction. At the intersections with Gilman and University the parking lanes could be used as turn lanes. Design the Shoreline Drive with a width not to exceed 48 feet and right-of-way not to exceed 100 feet.

Extension: If desired by Albany, extend the new Shoreline Drive north of the Phase II hotel site to connect with the roadway network in Albany.

Frontage Road: Eliminate the existing frontage road between University Avenue to the southbound Interstate 80 off-ramp at Ashby.

Utility Easement: Maintain the existing frontage road right-of-way from University Avenue to Gilman street as a minimum 25 foot wide utility easement.

Phase I Access: Locate a new intersection with University Avenue shall be located 400 feet west of the future southbound Interstate 80 off-ramp.

4.2.3 University Avenue

Section: Reconstruct University Avenue between New Shoreline Drive and Marina Drive. Design as a divided road with a minimum 16 foot wide landscaped median and a moving lane and one 12 foot side parking lane in each direction.

The University Avenue cross-section between the northbound ramps and new Shoreline Drive should accommodate four travel lanes plus turn lanes at the intersections.

Round-About: Construct a new intersection at University Avenue and Marina Drive as a round-about. Provide for bus stop facilities.

4.3 Transit Improvements

The Waterfront is presently served by the 51M AC Transit line with operating headways that range from 18 minutes to 30 minutes. It is recommended that this existing service be modified to enhance local transit access to the waterfront, and to provide transit service to establishments along Gilman Street, and to the retail center at Fourth Street. Developer exactions should support the incremental cost of the extension to AC Transit.

4.3.1 Split-Route

Split the route at the new Shoreline Drive into a 51P continuing to a layover at the Berkeley Pier and an alternative route 51W proceeding via a one-way loop northbound on the new Shoreline Drive to a layover point at the foot of Gilman, returning to University via Gilman, Fourth, Hearst, and Sixth-Streets.

4.3.2 Head-ways

Operate headways on each route segment at approximately 36 minutes on weekday commutes, and hourly on weekends. This route split should have

minimal impact on AC Transit operations since the route distance and travel time for 51P and 51W are essentially the same at the existing 51M.

4.3.2. Transportation Systems Management

Require developers to provide transportation systems management programs to minimize the use of single occupant automobiles and transit subsidies on site, including carpool and vanpool programs for employees, shuttle service for visitors and customers, and validated bus passes, similar to parking validation. Encourage the development of innovative transportation programs and facilities to move people from one part of the Waterfront to the other, and from the Waterfront to other parts of Berkeley. These facilities could reflect the recreational character of the Waterfront.

4.4.0 Minor Short-Term Improvements by the Developer

The present schedule for CalTrans improvements to Interstate 80 would not complete the portion through Berkeley until 1995 at the earliest. The Waterfront Plan assumes that Phase I of the development would take place before that date. However, under present conditions no development could take place at the Waterfront consistent with the City's policy of level of service "D" at intersections. However, there are reasonable improvements which the developer could make at the four freeway interchanges and local intersections which would enable the development called for in the Waterfront Plan to take place before completion of the freeway program. (See Figures 8 through 19). Table 1 indicates existing and projected level of service at key interchanges and intersections, and Table 2 defines the various levels of service.

Following are the minor improvements to be done by the developer:

4.4.1 Powell Interchange. Add an eastbound left turn pocket at the Powell/West Frontage intersection, subject to approval by the City of Emeryville.

4.4.2 Ashby Interchange. No minor improvements needed.

4.4.3 University Avenue Interchange. Signalize the southbound ramps intersection, relocate the West Frontage Road 450 feet to the west of the southbound ramps, add an eastbound left turn lane at University/West, frontage intersection, and widen West Frontage Road between Gilman and south of the Brickyard area to four travel lanes with additional left turn pockets at the University/Frontage intersection.

4.4.4 Gilman Street Interchange. Relocate West Frontage Road 450 feet west of the southbound ramps, signalize the northbound and southbound ramp intersections with Gilman, widen Gilman Street to provide right and left turn pockets at the ramp intersections and at Eastshore Highway, and restrict traffic on Eastshore Highway at Gilman Street to right-turn in and right-turn out only.

4.4.5 Sixth/University Intersection. Add a northbound left and southbound right turn lane.

5. Utilities

The major components of the utilities include improvements to: 1) the water supply system; 2) the sanitary sewer system; 3) storm drainage; 4) electrical, telephone, and gas services. The improvements are phased to support the land use/open space element.

Utility corridors shall be established in the publicly dedicated roadway right-of-ways. An additional minimum 25 foot-wide utility corridor shall be maintained in the existing CalTrans Frontage Road between University and the Albany City limits. (See Figure 20).

Parallel utility lines shall not be stacked in the same trench to conform with service and repair requirements of utilities.

5.1.0 Water System Improvements

The East Bay Municipal Utilities District is responsible for the provision of water in the Berkeley Waterfront. They own and maintain the water distribution network and treat and supply all water.

5.1.1 Existing Improvements

Service to the waterfront area is currently provided by two water lines. A 12 inch service extends west from Hearst Avenue under Interstate 80 and connects with an eight inch line that continues west in University Avenue to the marina area. A second 12 inch line extends under the freeway at Gilman Avenue and currently ends just west of the freeway.

The marina area is currently experiencing some fluctuation in water pressure because the lines west of the freeway are not looped or

interconnected and EBMUD has stated that they would probably require the lines in Gilman and University Avenues to be looped or connected before significant development can occur. In addition the City of Berkeley Fire Department stated the lines west of the freeway must be looped before the waterfront area can be developed.

EBMUD estimates that a significant level of development could be supported at the waterfront with the existing facilities provided the two existing lines are looped or connected

5.1.2 Brickyard and Meadow Water System Improvements:

The improvements required for the Waterfront Plan include the interconnection of the two water sources in a loop and the installation of new water main to serve the initial development areas.

Loop System: Install approximately 5200 linear feet of main in the existing Caltrans Frontage Road right-of-way connecting the Gilman Street water main with the existing water main in University Avenue.

New Main: Install approximately 1300 linear feet of new water line in the University Avenue right-of-way between Frontage Road and Marina Drive.

Install approximately 400 linear feet of new water line in the road right-of-way connecting University Avenue to the development area at the Brickyard.

5.1.3 Stables and North Basin Strip Water System Improvements

New Main: Install approximately 1500 linear feet of new water line connecting the Gilman Street service line to the northern hotel development area.

Install approximately 300 linear feet of new water line to connect the Waterfront retail center to the Frontage Road Utility corridor.

5.2.0 Sanitary Sewer Improvements

Sanitary sewer service in the Berkeley waterfront area is currently provided by a combination of the City of Berkeley and EBMUD. The City owns and maintains the sewer line network throughout the City of Berkeley collecting sewage and emptying it into EBMUD's facilities.

5.2.1 Existing Improvements

The City's sanitary sewage facilities supporting the Waterfront area extend west from EBMUD's interceptor with a 16 inch line under the I-80 freeway to the west side of the freeway. West of the freeway there is an eight inch force main extending west from the 16 inch line along University Avenue to the marin area.

The existing capacity of the 16 inch gravity sewer connection beneath I-80 has adequate capacity to support the level of development in the Preferred Alternative. Improvements will be required, however, west of the freeway to connect any development in the waterfront area to the 16 inch line within the Brickyard area.

5.2.2 Brickyard and Meadow Sewer System Improvements

The improvements required for the Waterfront Plan include the installation of new force mains serving the development areas and additional pump stations to maintain adequate flow.

New Main. Install approximately 1300 linear feet of new force main sewer line in University Avenue to connect with the existing 16 inch gravity line extending through the Brickyard area and beneath the I-80 freeway.

Install approximately 1000 feet of new force main sewer line in the Frontage Road right-of-way to connect to the hotel development area.

Install approximately 400 linear feet of new force main sewer line in the road right-of-way to connect to the development area at the Brickyard.

New Pump Stations: Install new pump stations at the intersection of Marina Drive and University Avenue and at the Brickyard development area.

5.3.2 Stables and North Basin Strip Sewer System Improvements

New Main: Install approximately 4900 linear feet of new force main sewer line in the utility Frontage Road Utility corridor extending service from the initial phase hotel/conference center area to the northern hotel development area.

Install approximately 300 linear feet of new force main sewer line to connect the retail center development area with the Frontage road utility corridor.

New Pump Stations: Install two new pump stations along the 4900 foot sewer extensions.

5.3.0 Storm Drain System (See Figure 21).

Storm drainage in the Waterfront area is primarily surface runoff. There is no formal storm drainage system west of the freeway. There are several

existing outfalls but these are for the primary system serving the City of Berkeley east of the freeway.

5.3.1 Existing Improvements

Existing outfalls for lines serving Berkeley east of the freeway are located near University Avenue approximately 1000 feet west of the freeway, near Virginia Street approximately 600 feet west of the freeway and near Gilman Street approximately 700 feet west of the freeway. The outfalls do experience silting and must be dredged every couple of years. The outfalls area also submerged during periods of high tide.

5.3.2 Brickyard and Meadow Storm Drain System Improvements

The improvements required for the Waterfront Plan include new storm drain trunk and the addition of a new outfall.

New Trunk Line: Install approximately 800 linear feet of new storm drain trunk within the Frontage Road utility corridor to connect the hotel/conference development area to the existing Virginia Street storm drain.

Install approximately 400 linear feet of new storm drain trunk within the road right-of-way to connect the Brickyard development area with the existing University Avenue storm drain.

Outfall: Extend the present outfall at University Avenue to the existing edge of the shoreline at the Brickyard, or across the Brickyard in an open natural configuration, to provide a more simple shoreline configuration and to minimize erosion to the shoreline edge.

5.3.3 Stables and North Basin Storm Drain System Improvements

New Trunk Line: Install approximately 1000 feet of new storm drain trunk within the new Shoreline Drive right-of-way to connect the northern hotel development area with the Gilman Street outfall.

Install approximately 2700 linear feet of new storm drain trunk within the new Shoreline Drive right-of-way to connect the retail center development area south to the Virginia Street outfall and north to the Gilman Street outfall.

5.4.0 Electrical, Telephone, and Gas Services

The Waterfront area is presently served electrical, telephone and gas services.

5.4.1 Existing Improvements

Electrical: A 12,000 volt system extends across I-80 just north of Gilman Avenue and then runs overhead parallel to the frontage road to Virginia Street and then to Marina Drive where it turns north to the North Waterfront Park. A second 12,000 volt system extends under the freeway at Hearst Avenue to the frontage road where it turns south to University Avenue and extends westerly, underground, in University Avenue out to the marina.

PG & E regulations require that electric service be underground.

Telephone: The existing system serving the Waterfront area consists of lines extending west from the freeway in University Avenue to Marina Drive. A second system is being installed in Gilman Avenue to provide service to the area north of Virginia Street.

Gas: Existing gas facilities in the Waterfront area consist of a six inch gas line extending west under I-80 just north of Hearst Avenue and then following the frontage road south to University Avenue and then west out to the marina. A three inch line extends west under the freeway just north of Gilman Avenue.

5.4.2 Brickyard and Meadow Electrical, Telephone, and Gas Improvements

The improvements required for the Preferred Alternative include new electrical, telephone, and gas improvements in all the major utility corridors in parallel but separate trenches.

New Services: Install approximately 1300 linear feet of new service in the University Avenue right-of-way.

Install approximately 1000 linear feet of new service in the frontage road utility corridor to connect the hotel/conference development area to University Avenue.

Install approximately 400 feet of new service in the road way right-of-way to connect the Brickyard development area to University Avenue.

Install approximately 1800 linear feet of new service in the relocated Marina Drive right-of-way to connect the University Avenue corridor to the existing marina area services.

5.4.3 Stables and North Basin Strip Electrical, Telephone and Gas Improvements

New Services: Install approximately 2100 linear feet of new service in the Gilman Street right-of-way connecting the existing services east of the freeway to the northern hotel development site.

Install approximately 1600 linear feet of new services in the Frontage Road utility corridor connecting the Gilman Street services to the retail center development site.

6. Community Design

6.1 Building and Parking Siting

6.1.1 Orient buildings to take advantage of the sun for outdoor private/public open space areas. Year-round solar access for adjacent buildings is encouraged.

6.1.2 Retain views out from public areas by the use of setbacks and orientation.

6.1.3 Design building footprints to allow for corners and spaces that can be used by pedestrians.

6.1.4 Place parking behind buildings, or in a central court, with screening of parking areas.

6.1.5 Locate and design auto entrances to prevent conflict with pedestrian circulation.

6.1.6 Orient pedestrian entrances to protect people from wind and noise.

6.2 Street Facades

6.2.1 Coordination of Design Elements

Coordinate such design elements as cornice lines, eaves, setbacks, form, color, materials, texture and landscaping to form a coherent grouping of related structures.

6.2.2 Articulation

Include activities and design features that will be attractive and interesting to pedestrians at the ground floor level.

6.2.3 Signs and Other Building Accessories

- o Integrate signage with the building design. Materials used for signs should be compatible with the building's architectural materials or be incorporated into artwork integral to the surroundings.
- o When multiple tenants in the same building provide signs adjacent to each other, establish a signage theme with compatibility of such elements as size, shape, lettering, colors, and design elements,. Vandal-proof and weather resistant signage is encouraged.
- o Screen secondary building accessories such as garbage receptacles, utility meters and mechanical and electrical equipment from the view of pedestrians. Screening of such accessories should be done in a way that is harmonious with the building design.

6.2.4 Heights

Heights of buildings shall not exceed the limits specified for each sub-area: 45 feet for the East Meadow/Phase 1 Study Area and the Stables Area, 25 feet for the North Basin Strip, and 15 feet for the Meadow. Abrupt changes in height may be appropriate, even desirable, in certain situations, such as the need for focal points and landmarks. Such techniques as stepbacks and terraces should be used to reduce the visual impact of structures in the generally open environment and to provide transitions to the Waterfront side of buildings.

6.2.5 Lighting

Design lighting for circulation, security, building/sign identification and pedestrian orientation to be unobtrusive and compatible with the open space design of the Waterfront. Avoid neon and large visible expanses of fluorescent lights.

6.2.6 Walls and Fences

Avoid large, unarticulated expanses of any particular wall material.

6.3 Landscaping and Open Space

6.3.1 Landscaping Near Buildings

Provide planters, trees, ground covers, and shrubs with automatic watering systems where they do not impede pedestrian movement and where the building owner and/or tenant will provide continuing maintenance. Design landscaping

to provide a transition to the natural, open space character of the Waterfront.

6.3.2 Sidewalk Areas

Include in sidewalk areas around buildings landscaping that is coordinated with the design of nearby buildings, and that provides a transition to the natural, open space character of the Waterfront. Use a minimum number of tree species in any one area. Provide embellished paving materials that create a pattern that is sensible in terms of cues for people who have visual impairments.

6.3.3 Parking

Incorporate adequate landscaping for visual screening of parking areas from public open space areas and rights-of-way. When parking areas are adjacent to public sidewalks or pedestrian/bicycle trails, include walls, berming, or plant materials that are generally three to four feet in height between the public access and the first row of parked cars. Light parking areas well for security purposes, but with low-scale fixtures that are compatible with the natural open space character of the Waterfront. Shade at least 50 percent of the surface area (as measured at 12 noon on June 21) to reduce heat build-up and to improve visual appearance.

6.3.9 Public Open Space Areas

Provide public open spaces places for people to come together for community interaction in a lively pedestrian environment. Design these spaces

to be wheelchair accessible with the entrances visible from the street. Include such amenities as artwork, patios with benches, fountains with nearby sitting areas, and interior courtyards. Locate these open space areas to take advantage of winter and afternoon sunlight, and to protect from prevailing winds.

6.4 Circulation

6.4.1 Pedestrian Paths

Design pedestrian paths and arcades which join different parts of buildings, streets and public areas. These paths should be lighted, should not contain blind corners, and should be marked for a clear understanding of direction and destination points. Define entry points to the pathways and arcades by architectural elements such as gateways, change in paving materials, signage, and artwork.

6.4.2 Building Entrances

Define building entrances by appropriate locations and by elements such as awnings, signage, artwork, or changes in paving material to define the entry point.

6.4.3 Transit Loading Points

Design transit loading points to provide protection for transit users in inclement weather. Provide adequate room for transit loading so that pedestrian traffic is not interrupted.

6.4.4 Bicycle Parking

Provide usable bicycle racks that are visible from a public way and that do not impede pedestrian or auto circulation. Locked and covered structures for bicycles should be provided and designed to be compatible with the building.

6.4.5 Disabled Access

Provide features for disability access that are compatible with the overall building design, that are clearly identifiable, and in compliance with other provisions of the Berkeley Municipal Code.

7. Plan Implementation

A specific plan must contain a program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out the development and open space objectives set forth in the plan. This section describes the programs the City of Berkeley and/or other public agencies will undertake to carry out the Waterfront Plan.

7.1 Site Improvements

The City of Berkeley, or another appropriate public agency, will fund, develop and maintain all site improvements needed for areas designated for public use. The private developer will fund, develop, and maintain all site improvements needed for areas designated for private use, transportation improvements needed to allow the amount of development proposed before

completion of Interstate 80 improvements by CalTrans, and all mitigations determined through the project review process.

Following is a summary of public and private responsibilities for Waterfront development.

Shoreline and Submerged Lands

1. The private developer will dedicate to a public agency a continuous minimum 100-foot wide shoreline band for public access along the entire waterfront.

2. The private developer will construct all shoreline improvements in the 100-foot wide public access band between Virginia Street and the Albany border, including shoreline stabilization, landscaping, and continuous public access bike trail and pedestrian trail.

3. The public will construct all shoreline improvements for the remaining portion of the waterfront and maintain all waterfront shoreline improvements.

4. The private developer will dedicate to a public agency all submerged lands.

Meadow

1. The public will acquire approximately 50 acres of the central Meadow that are not included in the 100-foot wide public access shoreline band, plus additional land for the East Meadow area, consistent with the Phase 1 development scheme.

2. The public will improve and maintain the Meadow for public use and access.

Brickyard

1. The public will acquire the approximately 10 acres of the Brickyard that are not included in the 100-foot wide public access shoreline band.

2. The public will improve and maintain the Brickyard for public use and access.

Roadways

1. The private developer will construct a new Frontage Road between University Avenue and the Albany border and will dedicate the right-of-way to the City to maintain.

2. The private developer will construct all on and off-site transportation mitigation measures required at the intersections of existing City rights-of-way.

3. The City will reconstruct University Avenue west of I-80 through the Waterfront planning area.

4. The city will negotiate with the developer regarding attainment of the Virginia Street right of way within the private development site to promote proper utilization of the development area. Abandonment of the right-of-way will require equivalent public benefits.

5. The City may abandon Frontage Road south of University Avenue as part of the CalTrans improvements in the I-80 corridor. Such an agreement with CalTrans will require equivalent benefits to the City.

6. The public will provide any additional bike/pedestrian bridges over I-80 not provided for in Caltrans' I-80 improvement plans.

Utilities and Storm Drains

1. The private developer will construct all utility and storm drainage improvements on and off-site required to serve the private development and will dedicate to the City to maintain the main trunk lines located in roadway ROW's or in a 75-foot wide utility easement located adjacent to the freeway.

2. The private developer will repair the Virginia Street outfall and fill approximately one-half acre of bay to improve shoreline appearance and provide public access.

3. The City will clean up Strawberry Creek outfall and maintain all outfalls to the Bay.

Table 3 is a summary of public costs needed to carry out the Waterfront Plan. The landscaping costs cover only a minimal level of work -- adding soil, planting and mowing -- not the costs of park and playing field development which will be subject to further detailed planning.

TABLE 3

PUBLIC COSTS OF WATERFRONT PLAN

	(Thousands of 1985 Dollars)			
	<u>Total</u>	<u>South of University</u> (includes Berkeley Beach & Brickyard Areas)	<u>Central Meadow</u>	<u>North of University</u> (Includes East Meadow, North Basin Strip Stables Areas)
<u>CAPITAL COSTS</u>				
Grading and Site Preparation	\$1,181	\$ 246	\$1,785	\$ 150
Landscaping and Trails	2,435	375	1,885	175
Roadways	1,545	25	--	1,520 ²
Shoreline Stabilization	2,735	1,980	--	755 ¹
2 Conditional Pedestrian- bicycle access bridges over I-80 1,000	500	--	500	
Storm Drain Outfalls	<u>315</u>	<u>315</u>	<u>--</u>	<u>--</u>
TOTAL	\$10,211	\$3,441	\$3,670	\$3,100
<u>ANNUAL MAINTENANCE COSTS</u>				
Landscaping and Trails	\$ 78.0	\$ 15.0	\$ 47.5	\$ 15.5
Roadways	268.4	.8	--	267.6
Shoreline Stabilization	80.5	24.0	--	56.5
Pedestrian/bicycle access bridges	30.0	15.0	--	15.0
Utilities and Storm Drains	<u>34.2</u>	<u>16.1</u>	<u>--</u>	<u>18.1</u>
TOTAL	\$ 491.1	\$ 70.9	\$ 47.5	\$372.7

Source: ROMA, based on Woodward-Clyde Memorandum dated January 2, 1986

¹Includes shoreline north and south of Central Meadow area. Excludes shoreline north of Virginia Street.

²University Avenue reconstruction.

Public Costs Not Included (Subject to further detailed planning and analysis)

- Acquisition of Central Meadow and Brickyard
- CalTrans Improvements to I-80 freeway
- Development of Berkeley Beach
- Development of playing fields, other public recreation facilities.
- Development of interpretive center
- Development of International Cultural Center

Private development costs have been analyzed in the preparation of the Berkeley Waterfront Plan, to assure a reasonable economic return to the developer. See Tables _____. These studies indicate both that the development proposed in the Waterfront Plan, with the allocation of site improvement costs indicated, would result in a reasonable economic return to the developer and a net increase in revenues to the City. These increased revenues to the City are expected to support needed additional City services to the Waterfront: police, fire, and administration of other City programs. Other kinds of maintenance such as lighting, landscaping, sewer service, and refuse collection are provided either on a pay for service basis or by special assessment district.

7.2 Methods of Financing Public Improvements

The fiscal analysis of the Waterfront Plan indicates that revenues from private development would be adequate to finance on-going City services, City-built roadway improvements, and improvement of the Strawberry Creek outfall. However, other capital improvements -- grading and site preparation of public areas, landscaping and trails, shoreline stabilization, and the pedestrian/bicycle crossings over I-80 -- as well as acquisition of the Central Meadow and Brickyard will require additional sources of funds.

7.2.1 Assessment District

Tax-free municipal bonds can also be secured through an assessment district, which can be formed to pay for public improvements which benefit a discrete area within a City. The city floats bonds to pay for improvements,

and the debt is paid by assessing property owners according to the benefits they receive from the improvements.

Depending upon the outcome of the redevelopment feasibility study, the City may pursue the use of an assessment district to supplement or supplant funds generated through tax increment financing.

7.2.2 Development Fees

The City can charge fees to developers that relate to the City's cost resulting from the development. These fees can be used for such purposes as mitigating employment and housing impacts. However, because they are one-time charges, they do not lend themselves to financing long-term capital improvements.

7.2.3. California Department of Transportation (CalTrans)

CalTrans is designing improvements to the I-80 Freeway through Berkeley, and the City has been advising that agency of policies of the Waterfront Plan. CalTrans intends to improve pedestrian/bicycle access to the Waterfront in conjunction with roadway improvements. All or part of the construction and maintenance costs of the two proposed pedestrian/bicycle crossings can be expected to be funded by CalTrans. The City will also negotiate to obtain support for shoreline stabilization and beach improvements, in return for making available the City-owned Frontage Road south of University Avenue for I-80 widening.

7.2.4 Park Funds

Several sources of funds for park acquisition and development are available at the State level, and additional funds are anticipated in the near future. In the recent past, the State Parks and Recreation Department and the Coastal Conservancy have made available funds for East Bay parks.

Following are potential sources of State of California funds for acquisition and development of the Meadow and Brickyard, shoreline stabilization, construction of trails, and development of other recreational facilities.

- 1985 Park Bond Act, State Parks and Recreation Department, \$6 million remaining for East Bay parks.
- 1984 Park Bond Act, Coastal Conservancy, \$2-3 million remaining for East Bay parks.
- State Urban and Coastal Park Fund.
- Parklands Fund of 1980.
- California Urban Waterfront Restoration Financing Authority. Grants for loans for roads, sewers, basic infrastructure on waterfront areas.
- California Department of Boating and Waterways, money for marina improvements, beach erosion control engineering assistance.
- Special Account for Capital Outlay (SAFCO), Parks and Recreation Department, oil revenue used for capital projects.
- 1986 Park Bond Act, for local government, \$100 million for local parks on June 1986 ballot. East Bay Regional Parks District is a potential recipient.

-- 1988 Park Bond Act, for State Parks, Parks and Recreational Department.

The City will also pursue potential sources of funds at the federal (National Park Service), regional (East Bay Regional Parks District) and local (possible City bond issue) levels. It is anticipated that public acquisitions and improvements at the Waterfront will require funding from a variety of sources.

7.2.5 Private Sources

The City will also pursue funding for acquisition and development from foundations and other philanthropies which wish to participate in improving the Waterfront in a manner consistent with Master Plan and Specific Plan policies.

7.3 Permit Application Process

7.3.1 Purpose

Before a property owner may proceed with any construction, development, rehabilitation, or land subdivision on the Waterfront covered by this specific plan, he or she must apply for and receive approval of a Master Development Plan (MDP) in accordance with the following procedures.

The purposes of the Master Development Plan are to assure comprehensive planning of the site, and to establish a two-phase review process that provides a more general level of review for a large area first, and a more detailed level of review for smaller portions of that large area later.

The MDP application must demonstrate that it is consistent with all policies and standards of the Master Plan and Specific Plan for the Berkeley Waterfront.

7.3.2 Joint Public-Private Development

In the event that a private developer intends to proceed with development of that portion of the Waterfront designated for private use, before development of the areas designated for public use, the developer must demonstrate how his or her plan is consistent with Master Plan and Specific Plan policies for the areas designated for public use, but is not required to include the information specified under Submission Requirements for the public portion.

In the event that a public agency intends to proceed with development of all or part of that portion of the Waterfront designated for public use, before development of the areas designated for private use, the public agency must demonstrate how the plan is consistent with Master Plan and Specific Plan policies for the areas designated for private use, but is not required to include the information specified under Submissions Requirements for the private portion.

7.3.3 Application and Fee

a. Application for a Master Development Plan shall be made to the Planning Commission in writing on a form provided by the Planning and Community Development Department. Such application shall be accompanied by a fee as set by Resolution of the City Council. The application may be filed by

the record owner (or owners) of the land, by a purchaser thereof under a contract in writing duly executed and acknowledged by both the buyer and seller, by a lessee in possession of the property with the written consent of the owner of record of the legal title to make such application, an agent of any of the foregoing duly authorized thereto in writing, or jointly by such eligible parties.

b. With submittal of required application(s) and payment of required fee(s) application for a Master Development Plan can be considered concurrently with applications for Land Divisions, Subdivisions and/or reclassifications of some or all property covered by a MDP application.

7.3.4 Submission Requirements

Four copies of the Master Development Plan shall be submitted to the Planning Director and shall include maps, plans, and written material containing the information described below. The Planning Director may waive or modify specific requirements for good cause.

a. A description of the ownership, leases, recorded covenants and conditions or other legal documents affecting control or use of the site.

b. A description of how the application is consistent with the Master Plan and Specific Plan for the Berkeley Waterfront.

c. A site plan indicating:

1. Lot lines, easements, grades and elevations
2. Extent, height, and location of structures
3. Land uses; number of discrete units
4. Public open spaces -- location, extent, use and maintenance

5. Preliminary landscaping plan
 6. Vehicle and pedestrian circulation; parking and loading;
driveways
 7. Drainage plan.
- d. Description of Plan provisions including:
1. Natural or manmade features to be removed
 2. Reliance on existing or provision of needed utilities
 3. Projected phases and timing of development
 4. Estimate of the number and types of jobs to be created --
construction and permanent
 5. Related off-site activities such as, but not limited to, public
improvements, traffic management, job training, housing
assistance and land dedications
 6. Estimated public revenues during each phase of development.
- e. Additional information as may be required by the Planning Director.

Information must be specific enough to permit evaluation of the project's intent and potential impacts -- physical, social, economic, and environmental. The Planning Director shall inform the applicant of any information required to complete the application within thirty (30) days of the initial application.

7.3.5 Public Hearing

Upon issuance of a Draft Environmental Impact Report or proposed Negative Declaration for the MDP, the secretary of the Planning Commission shall set the matter for Public Hearing before said Commission within sixty (60) days.

Concurrently, the Secretary of the Planning Commission will refer the proposed Master Development Plan and Draft EIR to the Landmarks Preservation Commission, Transportation Commission and other City Commissions affected by the project. Their comments will be forwarded to the Planning Commission for consideration at their public hearing on the proposed Master Development Plan.

7.3.6 Notices

Notice of the public hearing shall be given at least 12 days before the hearing date by:

a. Mailing a notice of the hearing to each property owner, resident and commercial tenant within a 300' radius from the boundaries of the site, and within 300 feet east of the Interstate 80 freeway right-of-way. Information on the notice shall include but not be limited to:

1. Time and place of public hearing;
2. City departments to be contacted for further information;
3. A small but readable site plan;
4. Description of uses, building heights, parking and driveways.

b. Posting at least one such notice on each block on which the project site faces.

c. Mailing such notices to:

1. Persons and groups who have registered with the Planning and Community Development Department their interest in receiving notices of proposals in the area in which the site is located.
2. Newspapers serving the community.

3. Persons and groups who have commented orally or in writing to the Planning and Community Development of the Planning Commission on a MDP application.

7.3.7 Conduct of Hearings

Each hearing shall be open to the public. All interested persons will be allowed to testify. Written testimony will be distributed to the Planning Commission and made part of the hearing record. Any hearing may be continued from time to time.

7.3.8 Findings

In order to approve a MDP, the Planning Commission shall find that:

- a. the plan is consistent with the Berkeley Master Plan and Specific Plan for the Waterfront, subject to the findings of concurrent or future review of specific permit applications.

- b. the plan does not appear, under the particular circumstances existing at the time at which the application is made, to be detrimental to the health, safety, peace, morals, comfort and general welfare of persons residing or working in the neighborhood of such proposed plan or to be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the City.

7.3.9 Decision

The Planning Commission shall render its decision within 30 days after the conclusion of the hearing and shall thereafter mail notice of its decision to

the applicant at the address set forth in the application, and shall file with the City Clerk a copy thereof. The City Clerk shall present said copy to the City Council at its next regular meeting. The Planning Commission shall also mail notice of its decision to any person who requests such a notification by filing a written request thereof with the Planning Department.

7.3.10 Certification by Council

Notwithstanding any of the provisions of this Chapter, the Council may call up for certification to it any action of the Planning Commission in approving or denying a Master Development Plan but such action of the Council shall be taken within 15 days from the date of the City Council meeting on which the Council received the Notice of Decision. Such call for certification shall stay all proceedings in the same manner as the filing of a Notice of Appeal.

7.3.11 Appeal to City Council From Decision of the Planning Commission

a. Appeal may be taken to the City Council by any person, firm or corporation or political subdivision of the State of California aggrieved or affected by the decision of the Planning Commission granting or denying a Master Development Plan. Such appeal shall be taken by filing a written Notice of Appeal with the City Clerk of the City of Berkeley and payment of a fee as set by Resolution of the City Council within 10 days after the mailing of the notice of the decision of the Planning Commission. The Notice of Appeal shall clearly and concisely set forth the grounds upon which the appeal is based. Each date falling on or within this time period shall be counted

except where the last day falls on a weekend or on a legal holiday in which case such date(s) shall be excluded in computing the time for filing of an appeal. The appeal shall be filed in triplicate and the City Clerk shall immediately forward 1 copy to the applicant and 1 copy to the secretary of the Planning Commission. Within 10 days after the filing of a Notice of Appeal, the secretary of the Planning Commission shall transmit to the City Clerk a copy of the application for Master Development Plan, a copy of the Notice of Appeal and a written statement setting forth the reasons for the Planning Commission's decision. The City Clerk shall make available to the Council, at the time the matter is considered by the Council, all other papers constituting the record upon which the action appealed from was taken.

b. The filing of a Notice of Appeal within the time and in the manner specified in subdivision (a) shall stay all proceedings by all parties in connection with the matter upon which the appeal is taken until the determination of the appeal, as provided herein.

7.3.12 Proceedings

If an appeal is filed of the Planning Commission's action on a MDP, the City Council shall review the action of the Planning Commission and may do any one of the following:

a. If the City Council believes the Planning Commission should reconsider the decision which was made, the City Council may refer the matter back to the Planning Commission.

The City Council shall refer those specific issues raised by the appeal which the Planning Commission is directed to investigate and reconsider.

If more than 60 days pass from the date the Council referred the matter back to the Planning Commission and the Planning Commission has made no subsequent decision, then the original Planning Commission decision and the original appeal shall both be placed back on the City Council agenda in the same manner as a new decision and appeal.

b. If the facts stated in or ascertainable from the application, the Notice of Appeal, the written statement of the Planning Commission setting forth the reasons for its decision, and other papers, if any, constituting the record do not in the opinion of the City Council, warrant further hearing, the City Council may affirm the decision of the Planning Commission and dismiss the appeal.

c. If, in the opinion of the City Council, said facts warrant further hearing the City Council shall set the matter for hearing and shall give notice of the time and place of said hearing as is provided for giving notice of the time and place for hearing before the Planning Commission, as set forth in Section 7.3.6.

The City Council may reverse or affirm wholly or partly, modify any decision, determination or requirement of the Planning Commission, and may make decisions, or determinations or may impose such conditions as the facts warrant. Any hearing may be continued from time to time.

The public hearing shall commence no later than 60 days from the date when the vote for a hearing is taken unless, on the request of the applicant and the appellant, the City Council establishes a later date for the hearing.

If the disposition of the appeal has not been determined within 30 days from the date the public hearing was closed by the City Council, then the

decision of the Planning Commission shall be deemed affirmed and the appeal deemed denied.

If none of the three actions described in Section 16A.10(b) has been taken by the City Council within 30 days from the date the appeal first appears on the City Council agenda, then the decision of the Planning Commission shall be deemed affirmed and the appeal shall be deemed denied.

7.3.13 Expiration Date

If no application for a Zoning Permit, Use Permit, or variance is filed under an approved Master Development Plan, the plan shall expire one year from the date of the final approval of the development plan. One extension for a maximum period of one year from the date of initial expiration may be granted by the Planning Director.

7.3.14 Amendments

A Master Development Plan may be amended by the Planning Commission, or upon appeal, the City Council pursuant to the same procedures specified for initial approval. Amendment must be initiated more than six months prior to the expiration date of an approved plan. Submission requirements shall be as set by the Planning Director.

7.3.15 Transfer of a Master Development Plan

Any Master Development Plan granted pursuant to the provisions of this Ordinance is transferable unless otherwise provided at the time of approval.

7.3.16 Concurrent Decisions

Applications for (a) Subdivisions and/or Land Divisions under the Subdivision Ordinance (b) reclassifications of land under the Zoning Ordinance, and (c) Use Permits, Variances, or Zoning Permits under the Zoning Ordinance may be acted upon concurrently with the application for a Master Development Plan if such actions are found consistent with the Master Development Plan adopted.

Applications for permits required by other City Ordinances may be considered and acted upon by the appropriate body concurrently but no rights granted through such approvals may be exercised until the Master Development Plan is approved unless the Planning Director finds such actions are necessary to protect the public health and safety.

7.3.17 Approval of Subsequent Applications for Zoning Permits, Use Permits and Variances

a. Unless alternative guidelines are provided in an approved Master Development Plan, an application for development of a subsequent phase of a Master Development Plan project will be deemed consistent if (a) the height and gross floor areas of the buildings are not more or less than in the approved Master Development Plan; (b) no building is relocated more than ten feet in any direction; (c) the character and mix of uses is not altered; and (d) parking is not increased or decreased.

b. If found consistent with the Master Development Plan, the Planning Director may issue Zoning Permits without a public hearing of further notification.

c. If found consistent with the Master Development Plan, the Planning Director shall refer applications for Use Permits to the Board of Adjustments for a public hearing.

Such applications shall be set for public hearing notices, and heard as described in Sections 7.3.5, 7.3.6, and 7.3.7. To approve such applications, the Board of Adjustments shall find:

1. The applications are consistent with the Master Development Plan for the site; and

2. The applications do not appear, under the particular circumstances existing at the time at which the application is made, to be detrimental to the health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such an application or to be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the City; and

3. Where variances are applied for the findings of Section 19.7 of the Zoning Ordinance are met.

Decisions of the Board of Adjustments may be appealed to the City Council as described in Section 7.3.11.

7.4 Relationship of the Specific Plan to the California Environmental Quality Act

An Environmental Impact report (EIR) has been certified for the Master Plan Amendment and Specific Plan for the Berkeley Waterfront, covering the impacts of the uses allowed by the Plan. This EIR covers the impacts of a certain mix and level of development. If individual projects are within the

prescribed level of development, and other uses consistent with the plan, then the environmental review process must address only the site-specific impacts of the project identified in the initial project review. All general impacts already addressed in the Master Plan Amendment/Specific Plan EIR should be included in the project EIR, if one is required, by reference.

A supplemental EIR must be prepared on a development application if the project is substantially different from the mix, intensity or type of use described in the Specific Plan, or if new information about the impacts of the project becomes available after the EIR on the Master Plan Amendment/Specific Plan has been certified. If an EIR on a project application is required, the Planning and Community Development Department will serve as lead agency, and the application will pay the cost of the EIR.

7.5 Procedures for Amendment of the Specific Plan

Pursuant to Section 65453 of the California Government Code, a specific plan may be amended to follow the same adoption procedures as are used for a General Plan. However, a specific plan may be adopted by resolution or ordinance, and may be amended as often as deemed necessary by the City Council. If the City's Master Plan is amended so that the specific plan no longer conforms to it, the Specific Plan also must be amended. The Government Code requires that mandatory elements of the City's General Plan (Master Plan) may be amended no more than four times per calendar year, following referral to other government agencies and at least one public hearing before the Planning Commission.

March 28, 1986

Project No. 16589A

Ms. Marjorie W. Macris
Planning Director
City of Berkeley
2180 Milvia Street, 2nd Floor
Berkeley, California 94704

Dear Ms. Macris:

Re: Planning Level Cost Estimates, Specific Plan
Berkeley Waterfront Development

In response to your request, we have prepared the planning level cost estimates for Specific Plan of the Berkeley Waterfront Development.

The infrastructural planning level cost estimates are presented in Tables 1 through 11 attached. Tables 1, 3, 5, 7 and 9 present private and public site preparation costs related to development and corresponding maintenance costs for various geographic Units of the Phase I and Phase II preferred alternative development. Tables 2, 4, 6, 8 and 10 present the yearly phased private site preparation costs related to development. Table 11 presents footnotes and assumptions related to the public and private site preparation costs presented in Tables 1, 3, 5, 7 and 9.

Phase I is broken down into the following geographic units: (1) the "Brickyard" (south of University Avenue); (2) "Meadow" area (north of University to Virginia); and (3) North Basin Strip (Virginia to Jones). See Tables 1 through 6.

Phase II is separated into: (1) North Basin Strip (Jones to Gilman); and (2) "Horse Barns" (Gilman to city limits). See Tables 7 through 10.

Site preparation costs typically include: (1) grading required and other work associated with land fill mitigation and general development; (2) utilities for the general development, including water, electric, telephone, gas, sanitary and storm drains; (3) roads required for the development; (4) landscaping of open space; and (5) traffic mitigation required to satisfy traffic flow requirements of the City of Berkeley.

Public site preparation costs related to development include such items as: (1) shoreline band improvements for the 100-foot strip around the waterfront (except in Phase II where these costs are considered "private" costs); (2) clean-up of existing Strawberry Creek Outfall; (3) pedestrian/bicycle access bridge over I-80; (4) Gilman Street and University Avenue reconstruction; (5) shoreline stabilization south of University Avenue; and (6) landscaping of "Brickyard area."



Annual maintenance costs include: (1) landfill mitigation maintenance work items such as open space landscaping, gas monitoring, and subsidence and erosion repairs; (2) road maintenance which is considered to be higher than normal due to the soft foundation conditions; (3) utility maintenance; and (4) shoreline riprap maintenance.

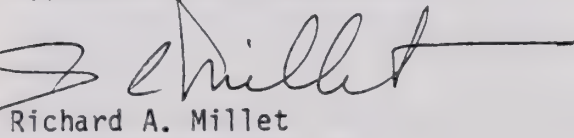
As discussed above, Tables 2, 4, 6, 8 and 10 present the private costs of the preferred alternative broken down by year for each of the waterfront geographic units. These costs include a management/contingency factor. The percentage completed by item by year are based on the serial aspect of the work, e.g. the need to complete general grading on the site and permit some settlement to occur before actual site development activities can begin. The management costs are broken down into engineering - 5%, construction management - 5%, and construction contingency - 15%. A construction contingency of 15% is considered reasonable for a project at this stage of development and could be lowered but not eliminated after detail design stage studies are completed.

"Utility Services and Storm Drainage Concepts," presented in our 5 December 1985 letter, has been used to develop the corresponding utility cost data included in Tables 1 through 10 with the elimination of utilities servicing the Marina Edge due to the removal of this area development. The background data and references used to prepare the above-referenced cost tables include the various ROMA planning reports to the City, Woodward-Clyde Consultants' 35 years of experience in Bay development projects, a review of various Wilson & Porter Engineering studies and reports prepared for ROMA, EMCON Associates' landfill closure report dated June 1985 prepared for the City of Berkeley, Harding Lawson Associates' report entitled "Preliminary Landfill Closure Plan" dated August 16, 1984 and prepared for the Santa Fe Land Improvement Company and the DKS technical memo to the City of Berkeley dated 10 December 1985.

If you have any questions regarding this letter or the cost tables, please call.

Sincerely,

WOODWARD-CLYDE CONSULTANTS



Richard A. Millet
Managing Principal
and Vice President

RAM/K175
Attachments

c: Mr. Alan Gatzke/ROMA
Mr. Bill Lee/ERA
Mr. Chester McGuire

TABLE 1
 PHASE I - "BRICKYARD"
 (South of University Avenue)

SITE PREPARATION COSTS RELATED TO DEVELOPMENT

Private Costs - None

Public Costs

1. Rough grading (1)	\$ 65,000
2. Utilities (3)	\$ 181,000
3. Access Drive	\$ 25,000
4. Shoreline stabilization south of University Avenue to Emeryville	\$1,585,000
5. Strawberry Creek cleanup (8)	\$ 250,000
6. Landscaping (4) 30 Ac @ 10k/Ac no irrigation	\$ 300,000

MAINTENANCE COSTS

Private Cost Items - None

Public Cost Items

1. Utilities (2% of site preparation cost)	\$ 3,620
2. Access Drive (3% of site preparation cost)	\$ 750
3. Shoreline Protection South of University Ave. to Emeryville (2% of site preparation cost)	\$ 24,000
4. Strawberry Creek Maintenance (5% of site preparation cost)	\$ 12,500
5. Landscaping (30 acres @ \$500/acre)	\$ 15,000

See Table 11 for notes

TABLE 2
PHASE I - "BRICKYARD"
(South of University Avenue)

PHASED PRIVATE DEVELOPMENT COSTS - None

TABLE 3
PHASE I - "MEADOWS"
(University to Virginia)

SITE PREPARATION COSTS RELATED TO DEVELOPMENT

Private Costs (Hotel/Conf/Rec Center Site)

1. Rough grading (1)	\$ 434,600
2. Landfill mitigation	
2a) Cap (2)	170,450
2b) Slurry wall	90,000
2c) Gas monitoring and studies	20,000
3. Utilities (3)	353,000
4. Landscaping (4)	185,500
5. Traffic mitigation (5)	1,000,000
6. New Frontage Road (Gilman to University) (6)(9)	2,990,000

Public Costs

1. Shoreline band	
1a) Rough grading (1)	\$ 91,500
1b) Landfill mitigation (2)	33,750
1c) Shoreline stabilization (7)	605,000
1d) Landscaping (4)	138,000
2. Meadow open space landfill mitigation	
2a) Rough grading	998,900
2b) Cap (2)	387,600
2c) Gas monitoring and studies	40,000
2d) Landscaping (4)	1,506,500
3. University Avenue demolition and reconstruction (1700 lin. ft. from I-80 to Marina Road)	1,215,000

MAINTENANCE COSTS

Private Cost Items (Hotel/Conf/Rec Center Site)

1. Landfill mitigation and landscaping (4% of site preparation cost)	\$ 18,500
2. New Frontage Road (Gilman to University) Costs Road (5% of site preparation cost)	129,250

Public Cost Items

1. Shoreline band (3% of site preparation cost)	26,000
2. Meadow open space Landfill mitigation and landscaping (4% of site preparation cost)	80,000
3. University Avenue repairs (5% of site preparation cost)	60,750
4. Utilities (2% of site preparation cost)	7,000
5. Traffic Mitigation (2% of site preparation cost)	20,000

See Table 11 for notes

TABLE 4
PHASE I - "MEADOWS"
(University to Virginia)

PHASED PRIVATE DEVELOPMENT COSTS

<u>Item</u>	<u>Percent Completed</u>	<u>Cost</u>
<u>Hotel/Conf/Rec Center Site (1987)</u>		
1. Rough grading	100	\$ 434,600
2. Landfill mitigation	100	280,000
3. Utilities	67	236,500
5. Traffic mitigation	25	250,000
6. New Frontage Road	50	<u>1,495,000</u>
	Subtotal	\$2,696,100
Management/Contingency (25%)		<u>674,025</u>
	Total	\$3,370,125
<u>Hotel/Conf/Rec Center Site (1988)</u>		
3. Utilities	33	\$ 116,500
4. Land Scaping	100	185,500
5. Traffic Mitigation	75	750,000
6. New Frontage Road	50	<u>1,495,000</u>
	Subtotal	\$2,547,000
Management/Contingency (25%)		<u>636,750</u>
	Total	\$3,183,750

TABLE 5
PHASE I - "NORTH BASIN"
(Virginia to Jones)

SITE PREPARATION COSTS RELATED TO DEVELOPMENT

Private Costs (Commercial Site)

1. Rough grading (1)	\$141,000
2. Landfill mitigation	
2a) Cap (2)	100,000
2b) Gas Monitoring and studies	10,000
3. Utilities (3)	54,000
4. Landscaping (4)	340,000
5. Shoreline band	
5a) Rough grading (1)	26,000
5b) Landfill mitigation (2)	20,000
5c) Shoreline Stabilization (7)	300,000
5d) Landscaping (4)	79,000

Public Costs

Additional pedestrian/bicycle access bridge over I-80	\$500,000
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MAINTENANCE COSTS

Private Cost Items (Commercial Site)

1. Landfill mitigation and landscaping (4% of site preparation cost)	\$ 18,000
2. Shoreline band (3% of site preparation cost)	13,000

Public Cost Items

1. Pedestrian/bicycle bridge (3% of site preparation cost)	\$ 15,000
2. Utilities (2% of site preparation cost)	1,000

See Table 11 for notes

TABLE 6
 PHASE I - "NORTH BASIN"
 (Virginia to Jones)

PHASED PRIVATE DEVELOPMENT COSTS

<u>Item</u>	<u>Percent Completed</u>	<u>Cost</u>
<u>Commercial Site (1987)</u>		
1. Rough grading	100	\$141,000
2. Landfill mitigation	100	110,000
5. Shoreline band	100	<u>425,000</u>
	Subtotal	\$676,000
Management/Contingency (25%)		<u>169,000</u>
	Total	\$845,000
<u>Commercial Site (1988)</u>		
3. Utilities	100	\$ 54,000
4. Landscaping	100	<u>340,000</u>
	Subtotal	\$394,000
Management/Contingency (25%)		<u>98,500</u>
	Total	\$492,500

TABLE 7
PAHSE II - "NORTH BASIN"
(Jones to Gilman)

SITE PREPARATION COSTS RELATED TO DEVELOPMENT

Private Costs (Retail/Commercial Site)

1. Rough grading (1)	\$205,000
2. Landfill mitigation	
2a) Cap (2)	153,000
2b) Gas monitoring and studies	3,500
3. Utilities (3)	133,000
4. Landscaping (4)	498,600
5. Shoreline band	
5a) Rough grading (1)	35,500
5b) Landfill mitigation (2)	26,000
5c) Shoreline stabilization (7)	430,000
5d) Landscaping (4)	110,000

Public Costs - None

MAINTENANCE COSTS

Private Cost Items (Retail/Commercial Sites)

1. Landfill mitigation and landscaping (4% of site preparation cost)	\$ 32,000
2. Shoreline band (3% of site preparation cost)	15,000

Public Cost Item

Utilities (2% of site preparation cost)	\$ 3,000
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See Table 11 for notes

TABLE 8
PHASE I - "NORTH BASIN"
(Jones to Gilman)

PHASED DIRECT DEVELOPMENT COSTS

<u>Item</u>	<u>Percent Completed</u>	<u>Cost</u>
<u>Retail Commercial Site (1998)</u>		
1. Rough grading	100	\$ 285,000
2. Landfill mitigation	100	156,500
3. Utilities	67	89,000
5. Shoreline band	100	<u>501,000</u>
	Subtotal	\$1,031,500
Management/Contingency (25%)		<u>257,875</u>
	Total	\$1,289,375
<u>Retail Commercial Site (1999)</u>		
3. Utilities	33	\$ 44,000
4. Landscaping	100	<u>498,600</u>
	Subtotal	\$ 542,600
Management/Contingency (25%)		<u>135,700</u>
	Total	\$ 678,300

TABLE 9
 PHASE II - "HORSE BARNS"
 (Gilman to City Limits)

SITE PREPARATION COSTS RELATED TO DEVELOPMENT

Private Costs (Hotel Site)

1. Rough grading (1)	\$247,000
2. Landfill mitigation	
2a) Top soil	182,000
2b) Gas monitoring and studies	4,500
3. Utilities (3)	354,500
4. Roads (6)	880,000
5. Landscaping (4)	775,000
6. Shoreline band	
6a) Rough grading (1)	71,500
6b) Landfill mitigation (2)	53,100
6c) Shoreline stabilization (7)	440,000
6d) Landscaping (4)	225,000

Public Costs

Gilman Street reconstruction	\$270,000
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MAINTENANCE COSTS

Private Cost Items (Hotel Site)

1. Landfill mitigation and landscaping (4% of site preparation cost)	\$ 38,500
2. Shoreline band (3% of site preparation cost)	18,000

Public Cost Items

1. Gilman Street repair (5% of site preparation cost)	\$ 13,500
2. Utilities (2% of site preparation cost)	7,100
3. Roads (5% of site preparation cost)	44,000

See Table 11 for notes

TABLE 10
PHASE I - "HORSE BARNS"
(Gilman to City Limits)

PHASED DIRECT DEVELOPMENT COSTS

<u>Item</u>	<u>Percent Completed</u>	<u>Cost</u>
<u>Hotel Site (1998)</u>		
1. Rough grading	100	\$ 247,000
2. Landfill mitigation	100	186,500
3. Utilities	67	827,000
4. Roads	67	590,000
6. Shoreline band	100	<u>789,000</u>
	Subtotal	\$2,049,500
Management/Contingency (25%)		<u>512,375</u>
	Total	\$2,561,875
<u>Hotel Site (1999)</u>		
3. Utilities	33	\$ 117,000
4. Roads	33	290,000
5. Landscaping	100	<u>775,000</u>
	Subtotal	\$1,182,000
Management/Contingency (25%)		<u>295,500</u>
	Total	\$1,477,500

TABLE 11
NOTES TO TABLES 1, 3, 5, 7, AND 9

1. Rough grading costs - assume inert general fill is received at \$3.00/cu yd. with a cost of \$1.00/cu yd. for onsite grading and an equivalent \$0.25/cu yd. added for double handling for surcharging roadways and other improved public facility areas.
2. Cap includes 1 ft. of topsoil and minimum level grass cover to reduce erosion.
3. Utilities are basic development features and include: sanitary, water, gas, electrical telephone and storm drainage. The basic data was obtained through studies performed by Wilson and Porter Engineering and include recent input from EBMUD, Berkeley Fire Dept., PG&E and PacTel. These utilities are located in a utility easement 25 ft. wide typically running along the eastern property line and westward beneath University Avenue.
4. Landscaping includes grass ground cover, irrigation systems, nominal planting of trees and shrubs and public restroom facilities. Landscaping cost for 75 ft buffer zone adjacent to Frontage Road are included in road cost below.
5. Traffic mitigation is based upon DKS Associates Technical Memorandum to the City of Berkeley dated December 10, 1985.
6. Road costs do not include reconstruction of University Avenue in "Meadows" development and Gilman in "Horse Barn" development; these costs are shown as public costs. Access Road traffic improvements are included elsewhere. Included in the Frontage Road cost is landscaping of a 75 ft buffer zone.
7. Shoreline stabilization assumes 16% of shoreline needs new protection, 34% a fifty percent repair and 50% a twenty-five percent repair; in addition, the shoreline is straightened at the storm outfall at Virginia Street and Gilman Avenue, respectively.
8. Does not include rechannelization to new outlet in "Brickyard" cove and is subject to future study.
9. Some or all of cost may be recovered from CALTRANS due to I-80 improvement plans.

Waterfront Specific Plan - 4-10-86

Economics Research Associates



Los Angeles, California
San Francisco, California
Seattle, Washington
Chicago, Illinois
Boston, Massachusetts
Washington, D.C.
Ft. Lauderdale, Florida

**ESTIMATION OF RESIDUAL
LAND VALUE FOR THE
BERKELEY WATERFRONT PLAN**

PREPARED FOR

THE CITY OF BERKELEY

APRIL 1986

PREPARED BY

**ECONOMICS RESEARCH ASSOCIATES
680 BEACH STREET, SUITE 370
SAN FRANCISCO, CALIFORNIA 94109
(415) 775-3170**

INTRODUCTION

The City of Berkeley, assisted by consultants, has prepared the Berkeley Waterfront Plan. It is the purpose of this report to provide information concerning the probable economic return to the land owner generated by the Waterfront Plan. ERA's assignment, as defined by the City of Berkeley and its Waterfront Plan consultant, was to estimate the residual land value generated by the development permitted in the Plan. Residual value, in the language of land development, is simply project income less project cost. The amount remaining is available for land purchase.

COMPUTATION OF RESIDUAL VALUE

Although the concept of residual value is reasonably simple, the computation of residual value is not so simple. A large number of variables must be considered. Since it would be cumbersome to describe every assumption and computation for each of the five development projects, we would like to describe the computations of residual value for one project in detail and then simply describe the other projects. The actual computations for all projects are presented in the Appendix.

The project selected for discussion is the 450-room hotel in Phase I which uses low-rise woodframe construction and surface parking. The project also includes a 30,000 square foot conference center. We have assumed this project is constructed during 1987 and 1988 and opens at the beginning of 1989. The steps necessary to compute the residual value from this hotel project are described below:

1. Net operating revenue is a key figure in determining annual cash flow, taxable income and eventual sales price. Several steps are needed to determine annual net operating revenue.

2. Room rate is a key variable. We have assumed, based upon the current rates of the higher quality hotels in the East Bay, that the 1989 average room rate for the hotel will be \$103. The relatively strong room rate reflects the excellence of the site with frontage on both the Bay and public open space.
3. Inflation is another important consideration. We have assumed that both revenue and cost items will increase at four percent per year.
4. Occupancy rate is also important. We have assumed that the occupancy rate of the hotel will climb from 50 percent in Year 1 to 66 percent in Year 3 and 72 percent in Year 4. The occupancy rate then stabilizes at 72 percent.
5. The room rate times 450 rooms, 365 days per year and the occupancy rate generates the annual gross room revenue.
6. Food, beverage and miscellaneous revenues are estimated at 80 percent of gross room revenue.
7. Total operating revenue is the sum of the above two items, and operating cost is estimated at 68 percent of operating revenue.
8. Net operating revenue is operating revenue less operating cost and site maintenance cost.
9. The value of the hotel if it were to be sold is determined by applying an 10 percent capitalization against the operating revenue (net operating revenue divided by 0.10).
10. We have assumed that this hotel development will be financed by a combination of equity (20 percent) and debt (80 percent).
11. The debt is assumed to be 30 years at fixed 11.5 percent interest.

12. The annual debt service amount, the interest amount and the principal paid are then calculated by a series of computer routines.
13. After a holding period of ten years we have assumed that the developer will sell the project.
14. The gross sales price has been determined by the net operating revenue and the 10 percent capitalization rate.
15. The net sales proceed to the developer/owner is determined by subtracting from the gross sales price a five percent real estate commission, three percent renovation cost, the remaining loan balance and the capital gains tax.
16. In order to determine the amount of the loan and the resulting annual debt service cost and to later compute depreciation and its tax ramifications, it was necessary to estimate project cost.
17. In the case of this hotel the building cost was estimated at \$30.3 million, the surface parking cost \$779,000 and the landscaping cost was \$1.6 million. Site development and infrastructure cost, which includes inflation from 1986, totalled \$8.4 million. Soft costs, which include architecture and engineering fees, permit fees and interest during construction, were an additional 25 percent of the hard cost.
18. Total hotel cost, excluding land but including infrastructure, amounted to \$51.4 million or \$114,200 per hotel room including the conference facility.
19. As mentioned previously, 80 percent of the above cost is financed and translated into an annual cost stream.

20. The before tax cash flow is simply the net operating revenue less the annual debt service.
21. Since in any real estate project the tax impact is an important consideration, it was necessary to compute the after tax cash flow.
22. Taxable income is determined by subtracting interest and depreciation expenses from net operating revenue.
23. Depreciation is computed on an 19 year straight line basis.. We used total project cost excluding land to incorporate the infrastructure cost into the basis.
24. The owner/developer is assumed to be in the 48 percent tax bracket. For those years where a tax loss occurs, the project generates shelter revenue at a 48 percent rate. For the years where a profit exists, it is taxed at a 48 percent rate.
25. The after tax cash flow is the sum of the before tax cash flow, the tax or tax shelter and the proceeds from sale.
26. The residual value is the sum of the annual cash flow, including the initial year equity outlay and the final year sales proceed, discounted to 1986 dollars at 12, 14, and 16 percent annual discount rates.

In addition to this major hotel, a freestanding 8,000 square foot restaurant is also included in Phase I. Phase II contains a second hotel of 250 rooms, a second freestanding restaurant of 10,000 square feet and a commercial complex of 50,000 square feet.

CONCLUSION

According to the detailed computations presented in the Appendix, the Waterfront Plan generates a residual land value in the \$8.5 to \$16.3 million range depending upon the return expected. At a 16 percent return the residual is \$8.5 million. At 14 percent it is \$11.9 million, and at 12

percent it is \$16.3 million (Table 1). It is the conclusion of Economics Research Associates that the Berkeley Waterfront Plan generates a reasonable economic return to the land owner particularly when one considers that the acquisition cost of the public open space, which will be determined through negotiations, will be added to the value generated by permitted land development.

Table 1

SUMMARY OF RESIDUAL VALUE
 BERKELEY WATERFRONT PLAN
 (Thousands of Dollars)

	Discount Rate For Future Dollars		
	<u>12%</u>	<u>14%</u>	<u>16%</u>
<u>Phase I</u>			
Hotel (450 rooms)	\$11,560	\$8,677	\$6,348
Restaurant (8,000 SF)	506	423	353
<u>Phase II</u>			
Hotel (250 rooms)	\$3,207	\$2,089	\$1,351
Restaurant (10,000 SF)	274	188	130
Retail Complex (50,000 SF)	792	504	314
Total Residual Land Value	<u>\$16,339</u>	<u>\$11,881</u>	<u>\$8,496</u>

Source: Economics Research Associates.

APPENDIX

BERKELEY WATERFRONT PHASE I HOTEL 31-Mar-86

[illegible]

[illegible]

BERKELEY WATERFRONT PHASE I RESTAURANT 31-Mar-86

[illegible]

BERKELEY WATERFRONT PHASE I RESTAURANT 31-Mar-86

[illegible]

BERKELEY WATERFRONT PHASE II HOTEL 31-Mar-86

[illegible]

BERKELEY WATERFRONT PHASE II HOTEL 31-Mar-86

[illegible]

[illegible]

BERKELEY WATERFRONT PHASE II RESTAURANT 31-Mar-86

[illegible]

BERKELEY WATERFRONT PHASE II COMMERCIAL COMPLEX 31-Mar-86

[illegible]